2003 BDA SYMPOSIUM MINUTES
JBDA JT&E, Suffolk VA
21-22 Oct 2003

CONFERENCE PURPOSE AND SCOPE: JBDA JT&E hosted the 3rd Annual BDA Symposium on October 21 and 22, 2003 at 7025 Harbour View Blvd, Suffolk, VA. Topics of discussion included current issues, problems, and initiatives within the BDA community, as well as future plans and potential enhancements (See attachment 1 for the agenda). JBDA also highlighted the findings and results of observation and analysis of BDA from Ulchi Focus Lens 2003. Attendees were from the Unified Commands, national agencies, a number of tactical units specializing in BDA, several current DOD initiatives aimed at improving BDA, and British and Canadian allies.

BRIEFINGS: The following briefings were given on the first day of the symposium. These briefs can be viewed via the "BDA Symposium" link on JBDA's SIPRNET homepage located at www.jbda.jte.osd.smil.mil.

WORKING GROUPS: The remainder of the symposium was spent in working groups that discussed the various topics outlined as follows

BRIEFINGS

1. **JBDA Test Director.** Remarks highlighted the current problems with BDA. It was stated that BDA, like most joint issues, may never be fully solved, but can be improved. ULCHI FOCUS LENS was a great opportunity for Joint study. JBDA used this exercise to test Joint experimental BDA enhancements and the results are indicative of the hard work done by the members of JBDA team.

2. **Featured speaker.** BDA can be improved, but not fixed totally. Suggested that units be tasked to perform analysis now conducted by federated partners. Intelligence (2) and Operations (3) must work together to plan BDA assumptions and criteria, and to maximize BDA results.

3. **CENTCOM Brief.** BDA would be helped by establishing a single unit manned, equipped, and trained to accomplish BDA, rather than federation and/or augmentation, both of which fall short of the solution set. The force needs reporting discipline and consistency (BDA reporting formats). Training is considered critical in understanding the BDA process. Automation tools need to be fielded which support reporting and analysis. The BDA community needs to support the Joint Targeting Toolbox (JTT). Suggested the collections effort be apportioned to BDA. It is important to strike a balance between finding and assessing targets. Finally, we must ensure our bosses have realistic expectations of BDA, and maintain focus on BDA effects, not bean counting.

4. **CENTAF Brief.** There is no silver bullet to fix the BDA problem: process, tools, and people are needed to solve it. The speed of operations in OIF prevented AOC BDA Cell

from knowing what targets had been struck. The variety and number of MISREP formats caused work-arounds and prevented parsing of data. The lack of a BDA TTP negatively impacted operations and consequently is currently being developed. Slowness of BDA information eventually produced reliance on Phase I data being used as Phase II reports, with predictable results. Management must be cognizant of the reliance on chat rooms and their use instead of official information flows. Tactical reconnaissance may need to be re-considered as a collection means for BDA. Suggestion was made that self-assessing weapons may need further investigation.

5. **JBDA Brief.** As JBDA completes analysis, transitioning of test products to the warfighters, and prepares to close down, JFCOM is being leveraged as the primary portal through which high value enhancements might be passed. Enhancements being considered include those developed, integrated, and tested during Ulchi Focus Lens 03:
    - US Forces Korea Joint BDA Guide
    - Maneuver/Mobile BDA TTP
    - Improved Federated BDA TTP
    - Standardized post-strike report format and flow
    - Improved Dissemination of SOF reports (ADOCS)
    - Designated reserve units for BDA augmentees
    - CD-ROM based rapid BDA training for augmentees
    - Improved use of multi-INTs for BDA training
    - Intra-AOC Target Manager Coordination Screen
    - Single Database system for BDA (links JTT(ITS), ADOCS, ASAS)
    - Single View Target Status Display
    - BDA Cell/Theater Dissemination web page
    - Ground force BDA server redesign
    - RELROK systems (GCCS-K) installed in Federated BDA cells
    - ITS interface developed for externally created reports
    - Upgraded BDA information technology tools

6. **EUCOM Brief.** Briefing addressed future EUCOM initiatives and considerations including Joint Fires Elements, process improvements, considering JBDA Korean studies, identifying requirements for JTT, considering new automated tools, and rewriting EUCOM directives.

7. **NAVCENT Brief.** Given that the pace of war outpaces BDA production, several suggestions are being worked, including: OIF Lessons Learned headed by a N2/N3 organization (NSAWC), refinement of WSV for better clarity, development of an automated MISREP system to keep pace with target production, looking for a joint COP solution, and working with JII/JFCOM for common solutions.

8. **JCS J2T Brief.** J2T has been tasked with solving toughest six letters in the English language: "FIX BDA." To that end, the J2T/BDA cell has been reconstituted. Additionally, they are considering the establishment of a national no-strike database and support the idea of a single MISREP tool as well as the requirement to use it. They also plan to reinstitute the Battle Damage Assessment Working Group (BDAWG) under the new title of Combat

Assessment Working Group (CAWG). This body will tasked with executing an integrated policy to solve BDA/CA problems as well as integrating IO and STO as well as greater integration/participation of J3 elements. A working group was conducted during the Symposium that addressed the issues of CAWG mission, charter, membership, and venue.

9. **USFK CESC Brief.** USFK is partnering with JFCOM on an ACTD addressing Effects Based Operations. USFK is seeking a continual updating of the 'system of systems' as the ITO/ATO is updated. Commanders want BDA to provide predictive assessments 48 to 96 hours out. USFK will be using some guided munition BDA predictions to free up ISR assets for future targets. The effects assessment cell is a new cell with BDA tie-ins. BDA is being used to support measures of performance. USFK will be using an automated system to track the BDA tasks to achieve effects. For EBO, hardware, databases, and personnel are currently the dominant issues.

10. **OIF Ground Truth Survey Brief.** Hardened target weapon effects during OIF were the subject of the brief. Models were utilized to determine weapons effects, however imagery and ground truth proved different in a number of instances. ISR did not give the real ground truth on many hardened targets. Bomb fusing has been identified as a key to target destruction. Consideration is being given to standing up a hardened target cell in the CAOC to address this issue.

11. **Quick Bolt support to BDA Brief.** AARGM ACTD demonstration was presented along with its potential contributions to BDA. This project uses a HARM missile as the host. The purpose of the ACTD was to provide situational awareness to the pilot and others on weapons delivery of Advanced Anti-Radiation Guided Missile (AARGM) (HARM+). Tests conducted have resulted in direct hits with information sent back from missile as programmed. There are current discussions regarding placing a similar sensor on other Navy missiles. This product is not expected to reach the fleet until 2008.

12. **JTT/ITS Update Brief.** The fielding and implementation plans for JTT versions 2.3 (ITS hybrid) and 3.0 (full ITS assimilation) were briefed. Coordination with the formal targeting schools and training deployments to key commands were addressed as supporting efforts for version 3.0. Significant improvements in speed and performance are expected in each subsequent version, with version 2.3 expected out in fall 2003 and version 3.0 during summer 2004.

BDA SYMPOSIUM
COMBAT ASSESSMENT WORKING GROUP
22 OCTOBER 2003

To be published upon approval.

BDA SYMPOSIUM
MANEUVER WORKING GROUP
21-22 OCTOBER 2003

Background

1. Lack of maneuver BDA Doctrine or TTP in existence
2. Common processes and procedures evident, but differences in execution
3. Close coordination with Order of Battle (OB) section(s) necessary and key to combat effectiveness call(s)
4. Intense architectural considerations to include a need for common maneuver numbering system for fixed target based systems

Discussion

1. **Tactical maneuver reporting:** Significant problems were experienced during OIF with regards to tactical maneuver reporting being passed up above division level. Successful resolution of this issue would generate an increased requirement for deconfliction at higher echelons. It was agreed that subsequent echelons should roll up both numbers & applicable information (unit ID, assessments, etc) into a database that can be queried as necessary for required information.

2. **BDA vs OB analysis responsibilities:** The question was posed as to whether or not it should fall upon BDA analysts to determine if tanks/trucks/equipment are dead or alive and conduct subsequent combat effectiveness. It was noted that OB analysts are better trained in this area as well as the fact that BDA-OB calls have historically not matched. OB is ultimately not a BDA responsibility. Respective intelligence shops in general must take ownership for this function and draw from the experience and capabilities resident in OB sections. It was agreed that the BDA shop should (in the schoolhouse solution) determine the extent of damage to equipment or given unit, then pass this information to the OB shop for the combat effectiveness call – although in practice, this does not always happen. The criticality of BDA and OB agreeing on percentages prior to forwarding information to G-2/A-2/J-2 was emphasized.

3. **Higher headquarters changing calls:** The issue was brought up regarding perceptions that the G-2/A-2/J-2 was frequently changing BDA calls in order to push the decision process. Participants were reminded that inputs provided to higher are exactly that – inputs.

4. **BDA Cell location/interaction with warfighters:** The statement was made that BDA cannot be done in remote rear area locations and that analysts must be up front where they can maintain an intimate knowledge of all aspects of the enemy situation and direct access to operators. This was further reinforced by the statement that (COCOM) maneuver BDA cells need to be collocated with the maneuver units. The point was made that COCOM BDA Cell need to and will be with the COCOM in order to be reactive to and support specified information requirements. In support of federated BDA, the statement was made that

federated BDA could work, but all applicable information must be fed to the applicable BDA Cells (i.e. perfect intelligence) and in a timely manner.

5. **Air interdiction/kill box target tracking:** A problem was noted with air interdiction in tying deep strike targets to coordinates/BE#s. It was additionally noted that air & ground units engage and track damage independently and never compare, deconflict, or tie that damage back to ground maneuver forces when they move into an area. Utilizing common unit IDs could prevent/solve this, however, unit IDs are only standardized within MIDB and differing unit ID methods were utilized during OIF by the USMC & Army. This made deconfliction/comparison of maneuver BDA reporting impossible to complete in a timely enough fashion to support operational decision-making. It was noted that EUCOM has begun assigning BE#s to kill boxes and then breaking respective kill boxes down further and adding unique O-suffixes to each sub box. Agreement was reached that a common maneuver target number system capable of tracking all aspects of air and maneuver BDA must be developed & enforced across service lines in order to facilitate comparison & deconfliction.

6. **Specific enemy unit ID importance:** Discussion arose regarding relevance and importance of specific enemy unit IDs to air and maneuver forces. The statement was made that air does not care 'who' they strike, only 'where'. The point was made that additional information would facilitate additional initiative on pilots' part, letting them know what/who needed to be struck & why.

Recommendations

1. Maneuver BDA (combat assessment, combat effectiveness) should be incorporated into the Combat Assessment Working Group (CAWG) as a working topic.
2. Maneuver BDA should be incorporated into BDA reference handbook.
3. A multi-service BDA pub should be developed & ultimately rolled up into a Joint Pub using the JBDA Maneuver BDA TTP as a start point. Process, terminology and architecture considerations should be included in the material.
4. A joint maneuver force BDA TTP should be produced as an interim step to incorporation into a Joint Pub.

A maneuver/mobile numbering system usable on current joint systems should be created to facilitate tracking, collection, assessment, and unit assignment functions.

BDA SYMPOSIUM
FEDERATED SYSTEMS WORKING GROUP
22 OCTOBER 2003

Discussion:

1. **Required management oversight:** Requirement to satisfy information requests from Federated Partners and track down reports/products significantly impacted personnel available to execute normal BDA cell duties. Additionally, the fact that BDA requirements are defined differently among the Federated Partners further complicated the situation. Consequently, the suggestion was made that limitations should be placed on size and scope of Federation.

2. **Command relationship:** Supported COCOM lacked direct command authority over supporting Federated BDA cells. Additionally, normal day-to-day responsibilities of Federated BDA cells began to conflict with and impact BDA support during the latter parts of the operation. These issues amplified the difficulties with maintaining a flexible stance and coordinating the BDA effort as the Commander's priorities shifted throughout the operation. In order to solve/avoid this in the future, forward liaison teams (if present) must manage their respective Federated BDA cell or supporting cells need to be officially chopped to the supported commander for the duration of operations.

3. **Cost vs Gain:** Although Federation provided the supported commander with target set experts, additional trained analysts and numerous subject matter experts, the personnel and effort required to coordinate the Federated effort negatively impacted the supported command BDA cell's ability to execute its mission in a significant manner. It was additionally noted that Federation did not help the forward deployed units.

Recommendations

1. Identify partners early by OP PLAN
2. Exercise the federations
3. Chop supporting cells to the supported CDR (OPCON)
4. Clarify roles and responsibilities of each partner
5. Identify billets and spaces for partners
6. Partners coordinate their own tools, support equipment
7. Develop TTP for partners, synchronize procedures
8. Define who can task whom
9. Exercise the partnership during peacetime
10. Coordinate augmentation with federation
11. Have LNOs for partners
12. Develop standardization or TTP for security and releaseability

AGENDA

Tuesday 21 October

0730-0830 Check-In
0830-0835 Administrative Notes
0835-0845 Opening Remarks
0845-0930 Featured Speaker Remarks
0945-1045 CENTCOM Brief
1100-1200 CENTAF Brief
1300-1350 JBDA Brief
1400-1425 EUCOM Brief
1425-1450 NAVCENT Brief
1500-1525 JCS J2T Brief
1525-1550 DIA/NMJIC Brief
1600-1625 USFK CESC Brief
1625-1650 JTT-ITS Update Brief
1650-1700 Day 1 Wrap-up

1900 Symposium Social (Omni Hotel)

Wednesday 22 October

0800-0810 Day 2 Plan of Action
0810-0825 OIF Ground Truth Study Brief
0825-0840 Quick Bolt support to BDA Brief
0850-1020 Working Group Discussions
1030-1115 Working Group Out briefs
1115-1130 Symposium Closing Remarks
1230-1400 Enhancement Demonstrations

- **BDA Training CD-ROMs (15 min – SECRET NOFORN)**
- **Theater Dissemination Website (15 min – SECRET RELROK)**
- **GCC-CACC Web Server (30 min – SECRET RELROK)**
- **Single View Server (30 min – SECRET RELROK)**

1400-end General Officer Steering Committee
1400-end Theater POC Liaison